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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/586,583      | 07/19/2006  | Masahiro Shimono     | 062783              | 7385             |

38834 7590 07/22/2008  
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WASHINGTON, DC 20036

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| EXAMINER |
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ADDIE, RAYMOND W

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| ART UNIT | PAPER NUMBER |
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3671

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| MAIL DATE | DELIVERY MODE |
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07/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/586,583 | <b>Applicant(s)</b><br>SHIMONO ET AL. |  |
|                              | <b>Examiner</b><br>Raymond W. Addie  | <b>Art Unit</b><br>3671               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/19/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/19/2006</u> .                                               | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-159189 (Kaneso) in view of JP 9-184104. Kaneso discloses a water collecting structure (1) comprising: A guide member (12), Fig. 5, including a water channeling surface (13b) inclined at a greater angle than that of a water-flow slope of a water-flow surface (7). A plurality of flow straightening plates (2) extended along a flow direction of the guide member (12) and juxtaposed in a direction orthogonal to the flow direction. See Para [0006, 0008, 0017 ]; Fig. 3. Wherein the upper surface of the flow straightening plate is flush with a water-flow surface. What Kaneso does not disclose is the use of curved lateral sides. However, JP '104 teaches it is known to dispose drainage assemblies adjacent roads and the like, as illustrated in Fig. 5, 6. As well as to provide curved lateral sides (72, 73) to provide flow straightening plates (7) with curved lateral sides in order to maximize the volumetric throughput of the water collecting structure. See Para. [0008]; Figs. 3, 4, 7. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the flow straightening plates of Kaneso, with curved surfaces, in order to prevent debris from accumulating in the drainage structure.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2001-159189 (Kaneso) in view of JP 9-184104 as applied to claims 1, 2 above above, and further in view of JP 10-43831 (Kyoei).

Kaneso in view of JP '104 discloses essentially all that is claimed, except for the use of a nonskid surface. However, Kyoei teaches it is known to provide shaped steel structures with anti-skid surfaces to prevent improve traction. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to provide the drainage grate of Kaneso in view of JP '104 with an antislip surface, as taught by Kyoei, in order to increase safety. See Kyoei Para. [0002]; Fig. 1.

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 7am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond W. Addie/  
Primary Examiner, Art Unit 3671

7/16/2008